

EDWARDS & ANGELL, LLP

COUNSELLORS AT LAW

SINCE 1894

101 FEDERAL STREET
BOSTON, MA 02110-1800
(617) 439-4444
FAX (617) 439-4170

Peter F. Corless
Direct Dial: (617) 517-5557
E-Mail: pcorless@ealaw.com

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DATE: July 3, 2002

SEND TO: Examiner Wesley Nicolas

LOCATION: United States Patent and Trademark Office
Group Art Unit: 1741

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FROM: Peter F. Corless

TEL. NO.: (617) 523-3400

FAX NO.: (617) 523-6440

MESSAGE: Re: U.S.S.N. 09/605,442, filed June 28, 2000
Attorney Docket No.: 50439-2

In connection with the above-referenced application attached please find:

- (1) Amendment Transmittal; and
- (2) Second Preliminary Amendment.

TOTAL NUMBER OF PAGES: 25, including cover sheet.

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FAX NO. 508 485 0363

P.06
B. J. Angell

Docket No. 50439-2
BS
7/23/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Barstad et al.

SERIAL NO.: 09/605,442

EXAMINER: W. Nicholas

FILED: June 28, 2000

GROUP: 1741

FOR: ELECTROLYTIC COPPER ELECTROPLATING COMPOSITIONS

THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS
WASHINGTON, DC 20231

07/25/2002 ASIN/DET 00000001-041105 - 09605442

01 FC:103 1702.00 CH
02 FC:102 336.00 CH

SECOND PRELIMINARY AMENDMENT

Please amend the above-identified application as follows.

IN THE CLAIMS

Please cancel claims 21-23 without prejudice.

*FAX RECEIVED
JUL 3 2002
GROUP 1700
Official*

28. (amended) An article of manufacture comprising:
a semiconductor wafer substrate having one or more microvias that have an aspect ratio
of at least about 4:1 and a diameter of about 200 nm or less,
one or more microvias containing therein an electrolytic copper deposit obtained from an
electroplating composition that comprises at least one soluble copper salt, an electrolyte, and one
or more brightener compounds having a molecular weight of about 1000 or less and that are
present in a concentration of at least about 1.5 mg per liter of the electroplating composition.

51. (amended) An article of manufacture comprising:
a semiconductor wafer substrate having one or more microvias that have an aspect ratio
of at least about 4:1 and a diameter of about 200 nm or less,
one or more microvias containing therein an electrolytic copper deposit obtained from an